Information and Communications Technology Results Package for Egypt

Sanitized version

September 2000

Egypt: ICT-RP

Executive Summary

Background. The government of the Arab Republic of Egypt (GOE) has recognized the high priority of expanding and deepening both Information and Communications Technologies (ICT) as a principal avenue to greater national productivity and global competitiveness. President Mubarak continues to emphasize ICT development as a centerpiece of national policy. A new Ministry of Communication and Information Technology (MCIT) was established in 1999 and, subsequently, a comprehensive national ICT plan was promulgated that focuses and prioritizes ICT development activities in Egypt. Numerous measures to liberalize the ICT sector have occurred in recent years, including the licensing of private sector companies to provide cellular phone service, and the expansion of the telecommunication infrastructure and Internet accessibility, as well as preparation of vital draft telecommunications legislation that should remove several constraints to enhanced ICT adoption in Egypt.

Problem Definition. Despite the efforts of the GOE to promote ICT, several challenges to ICT development remain. These include:

1. Absence of a transparent and consistent legal and regulatory framework for telecommunications and e-commerce;
2. Underdeveloped GOE and private institutions in the ICT such as MCIT, the Telecommunication Regulatory Authority (TRA), and Information Technology business associations;
3. Inequitable and limited access and availability of ICT infrastructure, especially in remote areas;
4. An insufficient awareness among the management of both private and public sector firms of the potential positive impact of ICT on productivity and competitiveness, resulting in low demand for ICT services;
5. An insufficient pool of qualified ICT management and technical professionals; and
6. A non-conducive business environment to business growth in general.

Purpose of the Results Package. The purpose of this Results Package (RP) is to improve Egyptian business competitiveness through increased technology adoption in both the public and private sectors. This will be accomplished through activities under two focus areas:

1. Improved legal and regulatory framework for the ICT development; and
2. Expanded adoption and delivery of ICT within Egypt.

Recent studies increasingly have shown that the liberalization of the telecommunications sector, the adoption of ICTs to improve business practices, as well as a healthy ICT sector itself, are significant contributors to the health of a nation's

economy.[1] This RP supports 1) strengthening the legal and regulatory framework and 2) enhanced adoption of ICT by private firms as well as new technologies developed by the ICT sector. These efforts will lead to improved efficiency and the Egyptian private sector's increased ability to compete globally. Thereby, the RP directly contributes to increased private sector trade and investment and USAID's Strategic Objective (S0) 16 "Environment for Trade and Investment Strengthened."

The above mentioned two focus areas correspond directly to the three Intermediate Results (IRs) under SO 16. These are: IR 16.1 Improved policy framework for Trade and Investment, IR 16.2 Improved private sector competitiveness, and IR 16.3 Enhanced opportunities for business growth.

The following are indicators of success of the ICT RP:

- The GOE's signature and ratification of the World Trade Organization (WTO) Basic Telecommunications Agreement (BTA);
- The GOE's signature and ratification of the WTO Information Technology Agreement (ITA);
- An increased number of private-sector telecommunications service providers in Egypt;
- E-Commerce laws passed by Parliament; and
- An increased number of new ICT businesses.

Linkages to Other USAID Projects. ICT cuts across many boundaries, and a number of USAID's activities incorporate ICT components. This RP will coordinate with the following USAID funded activities that support ICT activities:

- **Telecommunications.** USAID/Cairo Telecommunications activities provide assistance in telecommunications infrastructure, creation of an independent regulatory authority, as well as support MCIT and Egypt Telecom to help liberalize the telecommunication sector.
- **Growth through Globalization (GTG**). USAID GTG RP assists the private sector to become more competitive. Its activities includes 1) Business Link, which establishes a computer network among business associations under the auspices of the American Chamber of Commerce in Egypt (AmCham) and 2) firm-level assistance to IT firms and other businesses that endeavor to adopt e-commerce applications through the International Executive Service Corps (IESC).

[1] National Telecommunication and Information Administration (NTIA), U.S. Department of Commerce. *The Emerging Digital Economy*. 1999.

- **Development Support Program (DSP).** This cash transfer program supports economic policy reform, including policies related to the ICT sector. It is anticipated that some of the legal and policy reforms that will take place under the ICT RP will be included in the DSP program as policy reform benchmarks, including the signing of the WTO agreements, namely: the Basic Telecommunication Agreement (BTA) and Information Technology Agreements (ITA).

- **Workforce Development.** Efforts are underway to design a workforce RP that will provide professional training within several sectors, including the ICT sector.

Other USAID-funded projects with ICT components include the Ministry of Health Information Center, the Capital Market Development Project, the Public Finance project and the Commercial Law Development and Reform Program (CLDP). Close coordination between the ICT team and all other activities is essential.

The RP Activities. The purpose of this RP is to improve Egyptian's competitiveness through increased technology adoption in both the private and public sectors. Activities under this RP will include technical assistance, grants, training, and commodity procurements. The activities align into two focus areas: 1) improving the ICT legal and regulatory framework, and 2) expanding the adoption and delivery of ICTs within Egypt. The following provides a brief description of these activities:

1. **Improved Legal and Regulatory Environment Related Activities.** These activities seek to assist the GOE in establishing an enabling environment including liberalizing the telecommunications sector and establishing an e-commerce legal environment in Egypt. Activities under this focus area include:

- Assisting in the drafting of telecommunication rules and procedures based on the draft Telecommunication Law, expected to be approved by the Parliament early next year. The rules and procedures will cover areas such as licensing, tariff setting, interconnection, universal service access and dispute resolution. The objective of these activities is to establish a transparent and consistent legal and regulatory framework for e-commerce and telecommunications development in Egypt.

- Preparing assessments of the impact of Egypt's compliance with the WTO BTA and ITA, as a means of introducing international standards to the Egyptian economy at large and the ICT sector in particular.

- Assisting in the drafting of e-commerce laws, particularly dealing with electronic signature, validity of electronic information, encryption, security, computer related crimes, privacy, consumer protection and others as appropriate. The RP will also provide suitable training to the related institutions to ensure effective implementation of these laws, and training of judicial and legal professionals in both the public and private sector in e-commerce law and other ICT related legal

issues. Another potential activity would be providing support to the Cairo Arbitration Center to conduct dispute resolutions on-line.

- Strengthening the newly-formed GOE institutions that are responsible for the drafting and implementing of e-commerce and telecommunications laws, regulations and policies, such as the MCIT, the TRA, and the proposed ICT Federation. The technical assistance (TA) provided will include the definition of roles, responsibilities and organizational structure, enhancement of managerial skills, and development of procedures.

- Providing ICT specialized training as an integrated component to improving the legal and regulatory environment within Egypt, and strengthening institutional capacity. Training will strengthen GOE institutions to ensure long-term sustainability beyond the life of these interventions.

2. **Expanded adoption and delivery of ICTs within Egypt**. The RP includes activities that support private sector firms' increased adoption of ICT-related services and products, leading to increased productivity and competitiveness. Activities under this focus area are:

- Providing TA to non-ICT firms. This RP will provide TA within targeted non-ICT sectors such as the financial, pharmaceutical, tourism and agribusiness sectors to facilitate technology transfer of ICT applications and reengineered processes. The objective of this activity is to improve the private sector businesspersons' comprehension of the potential value in adopting ICT-related applications into their business. Follow-up to ensure successful implementation of the transferred technologies is a part of this activity. In addition, financial support will be provided via USAID's current Small Emerging Businesses (SEB) program. The SEB program will guarantee loans to small and medium enterprises seeking to adopt ICT to their businesses through Credit Guarantee Corporation (CGC) through the business foundations. This ICT RP will complement this CGC funding services by providing TA to the companies in formulating their business plans and in managing the business. This activity will include benefits to businesses in remote areas (including Upper Egypt) and help reduce the digital gap between Cairo/Alexandria and the rest of Egypt.

- Providing TA to ICT firms. This activity will focus on establishing and strengthening linkages between US and Egyptian ICT firms in the area of technology transfer so that the Egyptian firms can be more effective in delivering high-quality ICT-related products and services. This TA will include incubator-like consulting and advisory services. Also, in a manner consistent with the current financial-related support to non-ICT SMEs (above), USAID will provide similar support for firms directly engaged in ICT-related activities.

- Undertaking pilot projects that create demand for ICT and building awareness through success stories within the government and the private sector. Criteria for selecting pilot projects include: 1) creating an impact on the business environment;

2) showing significant results in a short period of six to eight months; and 3) being easily replicable (if appropriate); 4) support and commitment of top management; 5) ability to maintain the project subsequent to piloting; 6) direct impact on the business community; and 7) incorporating e-commerce elements.

Potential sectors for the private business pilots include financial, tourism, agribusiness, and pharmaceutical sectors. Potential GOE pilot projects include business licensing, GOE procurements of ICT products and services, electronic export licensing, and electronic licensing of spectrum frequencies.

- Supporting the creation of private-sector-led Telecenters to expand public and business awareness/education, to improve access to ICT, and to provide key ICT tools to individuals and businesses located in Egypt's small towns and villages. In addition, this activity reflects a specific focus on developing Telecenters as sustainable SMEs as a viable business model. Potential locations for Telecenters include public locations such as post offices and libraries, NGOs, and new stand-alone business enterprises. A feasibility assessment of Egypt's Telecenters and the performance of existing telecenters will be undertaken at the onset of this activity to assess how USAID support can best complement GOE's more special-focused centers that are public-financed.

- Assessing the venture capital market in Egypt in order to define ways of stimulating venture capital financing, the preferred tool for financing new or emerging ICT companies in the West. This study will research why venture capital funds have not been actively used to promote ICT businesses in Egypt.
- Providing technical assistance to strengthen ICT-related business associations. This activity will seek to collaborate with the existing Workforce Strategic Objective to expand and strengthen the role of existing high-tech associations. This activity will specifically focus on linking these associations with their U.S. counterparts where appropriate, and in establishing on-going activities within these associations that support brokering business partnerships and technology transfer arrangements between U.S. and Egyptian high-tech firms. Special focus will also support seeking avenues for reaching beyond Egypt in supporting their members' business expansion activities.
- Providing technical assistance to support the establishment of a private-led e-commerce environment. This activity will pull an array of private sector participants together in order to establish a viable e-commerce environment that includes, for example, financial/payment services and distribution/delivery capabilities. Without a comprehensive Egyptian solution put into place, as e-commerce expands it will reach out to external sources for these capabilities lessening the benefit to the Egyptian economy and firms operating in Egypt.
- Grants will be provided to U.S. and Egyptian non-governmental organizations (NGOs) to support activities that advance the adoption and delivery of ICT within Egypt through development of new technologies. In order to support the

development of new technologies and maintain flexibility of funding innovative approaches, the RP has a grant component.

- As an integrated component to improving the adoption and delivery of ICTs within Egypt, the TA will include a significant amount of topic-specific training within each of the above activities. These will serve to strengthen the ICT business associations and firms to ensure long-term sustainability beyond the life of these interventions.

Due to the rapid changes in the ICCT sector and the need to maintain flexibility in design, the RP seeks to provide broad guidelines rather than to define specific activities. More details concerning activities will be determined in the Implementing Contractor's annual working plans.

Implementing Methodology. The contracting methodology has not yet been determined, but it is anticipated that the majority of the work under this ICT-RP will be implemented via the issuance of a single Request for Proposal for providing multiple-year support from a prime contractor. This strategy will seek to establish a core capability that provides continuity and which will also include various sub-contractors, grants, task orders against current IQC contracts, and cooperative agreement grantees for carrying out short-term focused Technical Assistance activities. The main contract will be awarded for a four-year period, commencing in FY 2001, with a one-year optional extension. In addition to the technical assistance provided under this RP, the RP includes a modest level of commodities procured in support of key activities, as well as targeted training. Due to the dynamics taking place in the sector, and the absolute need for quality performance by the contractor and subcontractors, the contract will, of necessity, be as flexible as possible.

Partners. The main GOE partners for this RP are MCIT, TRA, and the Ministry of Economy and Foreign Trade (MoEFT). Private sector partners include the Credit Guarantee Corporation (CGC), business foundations implementing the USAID-funded SEB program, other business associations such as Information Technology (IT) associations, NGOs, and the Presidents' Council (established under the Gore-Mubarak Partnership initiative).

Customers. There are three target customers: (a) the private businesses in the ICT sector; (b) the business community members who have potential to adopt ICT, and (c) Egyptian citizens who will benefit from the improved quality of public and private sector services and products.

USAID Management. The Mission's Economic Growth/Privatization and Finance (EG/PF) Division will exercise the overall management of the RP. This will include one United States Direct Hire (USDH) and a Foreign Service National (FSN) in the EG/PF Division.

Performance Monitoring Plan. Monitoring of the indicators will be carried out by the contractor, except for policy issues included in the Development Support Program (DSP) matrix, which will be monitored, by the DSP technical assistance contractor. The contractor will undertake a baseline study at the onset of the implementation.

Other Donors Activities in ICT. Many donors as well as the private sector are contributing to the ICT sector. Listed below are some of the initiatives with which this RP will coordinate:

- The Canadian Post Office has signed a Memorandum of Understanding supporting the implementation of "Telecenters" in Egyptian Post Offices.

- The United Nations Development Program (UNDP) has established three Technology Access Community Centers (TACCs) in the Sharkia Governorate.

- The European Union (now European Commission) has supported the Private Sector Development Program (PSDP) in Egypt since 1985. This US$ 250 million program helps Egyptian companies identify European technology and partners, and is supporting the Information Technology initiative of the Alexandria Businessmen's Association.

- The World Bank's International Finance Corporation (IFC) has initiated a "Knowledge Academies" program. This US$12.5 million program involves the construction and operation of a school park with up to seven schools in the Sixth of October City area of Greater Cairo.

- The United Kingdom has funded technical assistance to provide institutional development support to the TRA, especially in the area of spectrum management. This support will continue until October of 2000.

U.S. Private Sector Initiatives. In addition to the above donor involvement, a growing number of U.S. ICT firms have made varying levels of specific commitment to increase their business engagement in Egypt. Firms that have made specific commitments in recent months include CISCO, Hewlett Packard, IBM, Intel, Lucent Technologies, Microsoft, Network Solutions, Oracle, PSINet, Sun Microsystems, Apple Corporation, and Motorola. These firms will provide key U.S.-Egypt firm-level linkages in the ICT sector.

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Acronyms

ABA	Alexandria Businessmen's Association
ACD	Activities Completion Date
AED	Academy for Education Development
AmCham	American Egyptian Chamber of Commerce
ANSWER	Application 'N Support of Widely-diverse End-user Requirements
ARD	ARD, Inc.
ARENTO	Arab Republic of Egypt National Telecommunications Organization
AUC	American University in Cairo
B2B	business-to-business
B2C	business-to-consumer
BTA	Basic Telecommunications Agreement
CGC	Credit Guarantee Corporation
CIP	Commodity Import Program
CLDP	Commercial Law Development Program
DOC	Department of Commerce (United States)
DSP	Development Support Program
EHITA	Egyptian High Technology Association
EITP	Egyptian International Trade Point (UNCTAD)
FAST	Federation Acquisition Services for Technology
FCC	Federal Communications Commission (United States)
FDI	Foreign Direct Investment
FEDSIM	Federal Systems Integration and Management
FSN	Foreign Service National
FSS	Federal Supply Schedule
FTS	Federal Technical Service
FY	Fiscal Year
GAFI	General Authority for Free Zones and Investment
GOE	Government of Egypt
GSA	General Services Administration
GTG	Growth through Globalization
GWAC	Government Wide Acquisition Contract
ICT	Information and Communications Technology
ICT-RP	Information and Communications Technology Results Package
IDSC	Information Decision Support Center
IEE	Initial Environmental Evaluation
IESC	International Executive Service Corps
IPO	Initial Public Offering
IQC	Indefinite Quantity Contract
IRM	Information Resources Management
ICT	Information and Communications Technology
IT	Information Technology
ITA	Information Technology Agreement
ITU	International Telecommunications Union

LE	Egypt Pound
LORP	Life of Results Package
MAARD	Modified Acquisition and Assistance Request Document
MCIT	Ministry of Communications and Informational Technology
MoEFT	Ministry of Economy and Foreign Trade
MoF	Ministry of Finance
MIC	Ministry of International Cooperation
MOU	Memorandum of Understanding
NGO	non-governmental organization
NTCA	National Telephone Cooperative Assistance
NTIS	National Technical Information Service
PASA	Participating Agency Service Agreement
PSC	Personal Services Contract
RFP	Request for Proposals
RP	Results Package
SEGIR	Sustainable Economic Growth through Institutional Reform
SEI	Software Engineering Institute
SME	Small and Medium (or Micro-) Enterprises
SO	Strategic Objective
SoW	Statement of Work
SW-CMM	Software Capability Maturity Model
TA	Technical Assistance
TRA	Telecommunications Regulatory Authority
UNCTAD	United Nations Conference for Trade And Development
UNDP	United Nations Development Program
USAID	United States Agency for International Development
USG	United States Government
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

I. Overview

A. Background

The Government of the Arab Republic of Egypt (GOE) has recognized the high priority of expanding and deepening both Information and Communications Technologies (ICT) as a principal avenue to greater national productivity and global competitiveness. President Mubarak continues to emphasize ICT development as a centerpiece of national policy. A new Ministry of Communication and Information Technology (MCIT) was established in 1999 and, subsequently, a comprehensive national ICT plan was promulgated that focuses and prioritizes ICT development. Numerous measures to liberalize the ICT sector have occurred in recent years, including licensing two private sector companies to provide cellular phone service, expansion of telecommunication infrastructure and Internet accessibility and preparation of vital draft telecommunications legislation that should resolve several constraints to ICT enhanced adoption and diffusion in Egypt.

Despite impressive and demonstrable progress, however, the ICT sector in Egypt is hampered by technical, institutional, legal and regulatory, human resources, and infrastructure obstacles that thwart greater private and public sector utilization and national productivity. These obstacles form a complex network of constraints and disincentives to enhanced participation and financial investment in the ICT sector. Consequently, activities (interventions) must be imaginative, comprehensive, and carefully coordinated to ensure widespread, measurable and sustained progress in the sector's and development. Furthermore, cooperation between public and private institutions in the development of the ICT sector is required if Egypt is to realize accelerated economic growth and productivity leading to increased global competitiveness.

B. Problem Definition

1. Legal and Regulatory Constraints

1.1 Telecommunication Laws and Procedures:

The GOE has begun to recognize the critical role to be played by the private sector in the area of telecommunications. While Egypt Telecom remains a government owned and operated monopoly, two private sector firms have entered the marketplace in wireless services. Efforts are also underway to begin partial privatization of Egypt Telecom, with twenty percent proposed for privatization at the end of 2000. Increased privatization of telecommunications in Egypt requires a substantive shift in this sector's

legal and regulatory environment – an environment that currently restricts the number of participants, and excludes any substantive role by the private sector.

1.2 E-Commerce Laws and Regulations:

The Egyptian electronic commerce (e-commerce) market is small and underdeveloped. A main reason cited is the lack of a predictable legal and regulatory framework that recognizes, facilitates, and enforces electronic transactions. There is widespread lack of trust and confidence in the security, integrity, reliability, and enforceability of electronic transactions. Electronic commerce will only reach its full potential in Egypt when the government, with private-sector participation, formulates a legal and regulatory framework that builds trust in e-commerce transactions, and when policies are established that provide confidence and direction to participants in electronic transactions. This would include the creation of a mechanism to secure transactions that take place over the Internet, the establishment of a certification authority for validating the identification of buyers and sellers, and the development of a system for electronic signatures for e-commerce contracts.

2. Institutional Constraints

The GOE has recently created several new agencies that are responsible for the development, management or enforcement of the ICT in Egypt. These include the Telecommunications Regulatory Authority (TRA) and the Ministry of Communications and Information Technology (MCIT). However, these institutions have not yet developed the institutional capacity to fully implement their dictates. For example, the TRA is a newly created entity whose mission is to regulate the ICT industry. However, the TRA does not have a strong legal foundation or regulatory framework to support its mission. For one reason, the new telecommunications law is still in draft awaiting Parliamentary approval. Furthermore, TRA is not fully staffed or equipped to perform its functions as a regulator.

Likewise, the MCIT is a new agency, established in October 1999. It is the entity responsible for setting the policies related to ICT; however, its mission is not yet fully defined and it lacks an organizational structure and qualified staff. The MCIT requires technical assistance in designing its organizational structure and operating units, including technical, management and human resource development.

There are several Egyptian private-sector ICT business associations and institutions. These include the Egyptian High Technology Association (EHITA), the Software Association, the Hardware Association, and the Internet Society. As is true of the GOE institutions, these private sector organizations lack clearly defined missions, organizational, and operational capabilities. As a result, none of these institutions serve as strong private-sector ICT industry associations actively engaged in moving the ICT sector forward.

The Minister of MCIT has proposed the creation of a parastatal organization to be known as "the ICT Federation" of Egyptian ICT industries, modeled after an existing federation of construction industries. As currently envisioned by the Minister, the primary purpose of the ICT Federation would be to certify IT companies and promote IT sector development. Notably, the notion of a federation has met with mixed responses from the Egyptian IT private sector. Some private firms view the IT Federation as an extra layer of bureaucracy due to the government involvement, and as duplicative of existing efforts of private sector IT associations. Other private firms fully support the idea of the Federation, viewing it as a self-regulatory organization.

3. Infrastructure Constraints

Over the past decade, USAID has provided considerable development assistance to the GOE to upgrade and expand its telecommunications infrastructure. This has had a significant impact on improving telecommunications in Egypt. However, USAID telecommunications infrastructure investments are coming to an end. At the same time, considerably more remains to be done in order to improve the level of connectivity in Egypt. The GOE realizes that the only way it will be able to ensure adequate investments in the telecommunications sector is through private sector investment.

The Egyptian marketplace faces many challenges that influence the potential expansion and sustainability of ICT products, services, and businesses. One focal challenge is the inability of the current infrastructure to support the sustained development and widespread use of ICT. Teledensity in Egypt is eight lines per 100 inhabitants. The rate of growth in teledensity does not correlate with the rate of population growth. At present, there is considerable disparity between the teledensity in Cairo and other major cities, smaller towns, villages, and rural areas. These are locations where total reliance on the free market and private sector may not be sufficient to improve the level of connectivity. Further, telephone service in Egypt is operated by Egypt Telecom, a GOE-owned monopoly, although recently, two licenses were approved for private sector companies to establish cellular phone service.

The potential exists to assist the TRA in establishing a Universal Service/Access program that will provide special incentives and/or concessions to encourage infrastructure development in Egypt's rural areas – minimizing the potential "digital divide" between the connected higher income groups and the unconnected in rural or disadvantaged areas.

4. Lack of Public Awareness

Egypt is experiencing both insufficient demand and insufficient supply of ICT services. ICT demand by both the public and private sector languishes, in part due to inadequate awareness of ICT's full potential in demonstrably improving Egypt's productivity and thus competitiveness.

Some businesses are waiting for the GOE to take the lead in implementing ICT. Others fear the changes they perceive that ICT will bring, especially with respect to transparency and information sharing.

The general lack of public awareness about ICT is due, in large part, to a lack of access to ICT by a broad sector of society. Computer availability is considerably low and internet access is minimal. Public libraries and other public access points do not typically make computers available to the public. There have been successes with cyber cafes but they are few and are concentrated in urban areas.

5. Business Environment Constraints

5.1 Finance

Recent studies have shown that Egypt's private sector is largely risk-adverse and unwilling to make significant investments in Egypt, -in ICT or in other areas - due to a fear of significant financial losses. The creation of new capital markets has not substantially modified the picture. While there are stock markets in Egypt, and while the GOE is putting in place regulatory authorities to oversee financial transactions, the level of trading in securities remains insignificant and the Egyptian stock market, as yet, cannot provide capitalization for promising enterprises.

5.2 Business Laws and Processes

The absence of an effective and enforced legal and regulatory environment continues to be an obstacle for existing businesses and a disincentive for investors and entrepreneurs to initiate or expand investments in the ICT sector. Despite the GOE's stated desire to attract investments, it has yet to put in place clear, transparent laws and regulations that satisfy potential investors.

The following are just a few of the major obstacles to investment as perceived by private firms:

- the tax burden is too high;
- labor laws are a disincentive to hiring;
- the legal system is not capable of handling or resolving disputes in an expeditious and transparent manner;
- laws and regulations are sometimes modified in an unpredictable way, thus creating confusion and a climate of uncertainty; and
- while professing its intentions to open its markets to free trade, the GOE continues to have relatively high tariffs and a plethora of non-tariff barriers.

In summary, Egypt has a weak manufacturing and service economy. But, signs are beginning to appear of an expanding role of the private sector in leading the Egyptian economy to join the global marketplace.

C. USAID and Other Donors Support of ICT Development In Egypt

1. USAID Support to ICT other than this RP

By nature, ICT cuts across many boundaries, and several USAID/Egypt activities incorporate ICT components. The following are some of these activities:

- Since 1978, USAID/Egypt has invested heavily in the improvement and expansion of Egypt's telecommunications sector, especially in the telecommunications networks of Cairo and Alexandria. Between 1978 and 1996, USAID completed four telecommunications projects valued at USD$324 million. Additional support provided since 1996 has expanded and enhanced these systems, including procurement of additional "hard" infrastructure, training, and technical assistance. Currently, USAID-funded contractors are completing an infrastructure development master plan for the Egyptian government.

- In the area of business development, in 1996, USAID's Growth Through Globalization Program (GTG) RP was initiated. This USD$123 million program seeks to increase the competitiveness of Egyptian firms through technical assistance and support to private sector organizations. GTG programs include the Business Link wide-area computer network established and operated under the American Chamber of Commerce. The International Executive Service Corps (IESC) has provided firm-level assistance in a variety of areas, including the application of ICT and is expected to embark on a pilot e-commerce project. GTG has supported the development of the Egyptian Center for Economic Studies (ECES) as an independent think-tank, whose reports include topics relevant to ICT for economic development and ICT-related legal and regulatory reform. USAID/Egypt expects to complete a major endowment for this organization in the near future.

- The USAID/Egypt Commodity Import Program (CIP) is an existing USAID/Egypt program through which Egyptian private sector firms can obtain loans through local banks for acquisition of U.S. commodities including ICT equipment. Typically there is an 18-month no-interest grace period in repaying the loan to the Egyptian bank, with the loan repayment typically taking place within four to five years in Egyptian pounds.

- The USAID/Egypt Development Support Program (DSP) is a conditional cash transfer program that will potentially provide USD 200 million per year to the GOE for achieved policy reforms over a four-year period starting in 2000. ICT policies that are expected to be considered for adoption by DSP are compliance with the WTO BTA and ITA.

- A variety of other USAID projects have significant ICT components. These include the Ministry of Health Information Center, the Trade and Commercial Law Reform

program, Strengthening Intellectual Property Rights in Egypt (SIPRE), the Administration of Justice Program, and most recently, support to the Ministry of Finance.

- The Workforce program under Strategic Objective (SO) 17 is responsible for training, including technical training in ICT areas. SO 17 is planning an activity to train 500 individuals as an initial pilot project towards meeting the MCIT's goal of training 5,000 people per year. Close coordination between SO 17 and the ICT RP is essential to ensure that the ICT-qualified workforce is created to support ICT adoption and diffusion in Egypt.

2. Other Donor Activities In ICT

As with USAID, many donor projects include substantial ICT components, even if ICT is not the main focus. The following are some examples of these projects:

- The **Canadian Post Office** has signed a Memorandum of Understanding supporting the implementation of "Telecenters" in Egyptian Post Offices.

- Egypt also participates in the **World Trade Point Program** of the United Nations Conference on Trade and Development (UNCTAD). This program is helping to spread electronic commerce networks worldwide, with special emphasis on the participation of small and medium-sized companies. In Egypt, the program is run under the auspices of the Ministry of Economy and Foreign Trade. In addition to providing Web-based links to company information, the program started to build a database of records of exporters and producers, that, as of August 2000, held 6,000 records. Plans are to eventually connect this database to overseas Trade Point sites.[2]

- The **European Union** has supported the Private Sector Development Program (PSDP) in Egypt since 1995 with an allocation of US$25 million. By 1998 this budget had reached US$250 million. The program seeks to assist Egyptian companies' international competitiveness through improved product design, quality and decreased production costs. It helps Egyptian companies to identify European technology and partners, and is supporting the Information Technology initiative of the Alexandria Businessmen's Association.

- The **World Bank's International Finance Corporation** (IFC) has initiated a "Knowledge Academies" program. This US$12.5 million program involves the construction and operation of a school park with up to seven schools in the Sixth of October City area of Greater Cairo. The project sponsors are Knowledge International Group (KI) located in Cairo and the Egypt and Financial Instrument and Investment Corporation (FIIC) located in the US through its affiliate, Knowledge International. Of the total cost, IFC will provide the Egyptian pound

[2] Personal communication, Eng. Mostafa Said Ahmed, First Under Secretary, Ministry of Economy and Foreign Trade, and Head of Egyptian International Trade Point, 20 July 2000.

equivalent guarantee of US$3.75 million equivalent to an Egyptian lender to the project and IFC will subscribe equity in the company up to a maximum of US$0.5 million. A pilot project which will seek to demonstrate that high-technology software and interactive multi-media systems can be utilized to simultaneously enhance students' learning experience, and teachers' effectiveness in the classroom. Construction of a school park was scheduled to commence in the first quarter of 2000, and is expected to be in full operation by June 30th, 2002. The seven schools will serve 7,500 students. If successful, the project would represent an initial phase of a much larger initiative that could grow to 1,000 schools in Egypt and give rise to the possibility of replicating the project in other countries in the Middle East and North Africa.[3] With funding in part from USAID under the SO17 program, the World Bank Development Institute also will be opening one of its Global Distance Learning Centers in Cairo in the near future. These multi-media centers are designed to provide Internet access and computerized learning environments for private- and public-sector policymakers.

- The **United Nations Development Program** (UNDP) is leading an effort to establish Technology Access Community Centers (TACCs) in rural areas to introduce computers to people who do not usually have access to computers because of income, education, or location. Three centers have been established located in the cities of Zagazig and the Tenth of Ramadan, and have already provided training for 2,000 people. In addition to UNDP funding, the project receives contributions from the host governorate, the Chamber of Commerce, and the United Nations Volunteers. The MCIT, who contributes leased lines to the centers, is expanding the concept of the TACCs to include additional centers throughout Egypt.[4]

- Finally, with funding from the **United Kingdom**, Denton Hall, a private British Company, has been providing institutional development support to the TRA, especially in the area of spectrum management. This support continues until October of 2000.

3. U.S. Private Sector Initatives in ICT.

In addition to the above donor involvement, a growing number of U.S. ICT firms have made varying levels of commitment to increase their business engagement in Egypt. The following are some of these private sector initiatives:

- **CISCO** signed a protocol with the MCIT to establish a CISCO Academy in Egypt. It will be comprised of two main offices and ten branches in private sector companies, in addition to training centers in different governorates. Besides the human resources portion, Cisco's agreement includes a $1 billion, three-year investment program, aimed at establishing an Egyptian high-speed telecommunications network. Cisco is also providing training centers to be used

[3] World Bank Summary of Project Information (SPI) document entitled "Egypt-Knowledge Academies"
[4] UNDP newsletter *Choices*, June 2000, and personal communication with Sherif El Tokali, Information Technology Office, UNDP/Cairo, 20 July 2000

by 1,000 trainees a year in the fields of design, management and operation of communication networks, and upgrading related programs.

- **HEWLETT PACKARD (HP)** is working with Telecom Egypt to create a main control center for the telecommunications "Network Operation Center," the first of its kind in the Middle East and Africa. HP has agreed to establish a specialized training center for telecommunications engineers to serve this project.
- **IBM** signed a protocol with the MCIT to train software development professionals. The protocol entails training a total of 15,000 university graduates, at a rate of 3,000 a year for five years. The protocol also includes additional experience for the top 10% of each trainee group a year to work in the company's software development centers in the U.S. and Europe. The total program will cost IBM $35 million.
- **LUCENT TECHNOLOGIES** signed with EgyNet a number of agreements worth $51 million to execute the second phase of the Financial Institutions Network. The first phase was inaugurated in March 2000 and is operated by a local private company. The Lucent Software Center, inaugurated in July 2000 is a communications training center, which is the first of its kind in the Middle East. The center's main objective is to prepare wireless software development professionals for this high tech field. Egyptian universities and higher institution graduates will have the chance to receive training and become Lucent certified professionals.
- **MICROSOFT** signed with the MCIT a Joint Cooperation Protocol in January 2000. The Protocol outlines a framework to help support the establishment of a stronger Egyptian IT market, and boost the skills level of Egyptian IT professionals both in quantity and quality. The agreement provides increased support from Microsoft to its education partners in Egypt and includes a number of Microsoft technical training scholarships and other initiatives, such as providing software packages for the academic sector and governmental institutes at reduced prices.
- **NETWORK SOLUTIONS** specializes in registering company domains on the Internet. An agreement has been signed to give Telecom Egypt the capability to register domains on the Internet in Egypt. This is Network Solutions' first agreement of its kind in the Middle East and Africa. The agreement includes cooperation with Network Solutions to improve the registration service of domains in the Arabic language, similar to what has occurred in Japan, China, and India.
- **ORACLE** signed an agreement with the MCIT and the Ministry of Higher Education in January 2000 to offer Oracle's programs for discounted prices to students. Oracle will provide training to a large number of university students and professors on large-scale database programming, in addition to establishing a Regional Software Development Center to improve database applications.
- **SUN MICROSYSTEMS** is studying the establishment of an engineering center to design and upgrade computer programs and systems using the Unix operating system. This center is Sun's 18th worldwide. It will concentrate on Arabizing the company's applications and introducing them to the market.

- **APPLE CORPORATION** and the Egyptian Ministry of Education and MCIT are planning a pilot project that will provide 30 Apple Books to 30 classrooms. In order to bring this pilot project to a successful conclusion, CITE, the Apple distributor in Egypt, will bring Apple expertise to the project in the form of education methodology, training for teachers, hardware, software and networking technology.
- **MOTOROLA** has submitted a proposal to the MCIT to create a Software Engineering Institute (SEI). Motorola held a two-week workshop in Egypt to educate the industry, academic community and government officials about the role and value of an SEI. Motorola has agreed to support the SEI for 3 years with up to $100,000 in cash and in kind services per year.

D. Customers and Partners

1. Customers

The intended beneficiaries of the ICT Results Package (RP) are Egypt's private sector firms, GOE and private individuals. To this end, the ICT RP promotes USAID/Egypt's strategic goal: **A Globally Competitive Economy Benefiting Egyptians Equitably** by supporting Strategic Objective (SO) 16: Environment for Trade and Investment Strengthened, and SO 16's three Intermediate Results (IRs): Policy Framework for Trade and Investment Improved (I.R. 16.1), Private Sector Competitiveness Improved (I.R. 16.2), and Opportunities for Business Growth Enhanced (I.R. 16.3).

1.1 ICT Businesses:

Targeted and effective ICT technical assistance to Egyptian ICT firms will serve to enhance their ICT technical expertise, resulting in improved competitiveness. This support will also serve to close the "digital divide" in ICT access and use between urban and rural areas in Egypt, thus benefiting their consumers.

1.2 Non ICT Private Business Sector:

Non ICT private firms will also benefit from the ICT RP. Specifically, as businesses become aware of the impact of ICT on their profitability and ability to compete in the global market. Furthermore, firms willing to invest in ICT will receive technical assistance to help them incorporate ICT in their businesses; thus, increasing their productivity, competitiveness and efficiency.

1.3 Private Citizens

The ICT RP will benefit Egyptian citizens through improved delivery of public sector services (e-government) and private sector ICT goods and services.

2. Partners

Complete and successful implementation of ICT RP activities will require input and support from a number of USAID partners. These partners include the GOE, USAID-funded contractors and grantees (including U.S. non-governmental organizations (NGOs) and local NGOs), Egyptian private firms and business organizations, and other donors.

2.1 GOE

GOE ICT RP partners include the MCIT as the primary counterpart, the Telecommunications Regulatory Authority (TRA) and the Ministry of Economy and Foreign Trade (MoEFT).

2.2 Private Sector Business Associations

Potential ICT and business associations serving as partners include the American Chamber of Commerce (AmCham) in Egypt, the Alexandria Businessmen's Association (ABA), and the Egyptian High Tech Association. Other potential partners include the Egyptian Software Association, the Computer Association, and the Internet Society. Further, if the MCIT's proposal for the establishment of a private sector led parastatal ICT Federation is approved, the Federation may become another partner, subject to USAID review and approval.

2.3 Credit Guarantee Corporation

The Credit Guarantee Corporation (CGC) represents an additional potential partner. CGC has a proven track record with USAID creating or expanding credit instruments to Egyptian private businesses.

2.4 US-Egypt Partnership

The U.S.- Egypt Partnership under the leadership of Vice President Gore (on behalf of President Clinton) and President Mubarak established a Joint Committee for Economic Growth to engage in government-to-government dialogue. This Joint Committee established a number of specialized subcommittees, including Subcommittee II which focuses on High Technology. The Partnership also established a Presidents' Council of senior private-sector executives in Egypt and in the US. The President's Council may become a key partner in the ICT RP, particularly in the area of promoting ICT legal and regulatory reform.

2.5 NGOs

There are a large number of U.S.-based and local NGOs engaged in ICT-related activities in Egypt. U.S. and local NGOs will potentially serve as ICT RP activity implementing partners, particularly in rural areas in Egypt.

E. Results to be Achieved and Indicators of Performance

The ICT RP's purpose is to improve Egyptian business competitiveness through increased technology adoption of ICT. This will be accomplished through activities that support two (2) focus areas:

1) Improved legal and regulatory framework for ICT sector; and
2) Expanded adoption and delivery of ICTs within Egypt.

Recent studies have increasingly shown that the liberalization of the telecommunications sector, the adoption of ICTs to improve business practices, as well as a healthy ICT sector itself, are significant contributors to the health of a nation's economy.[5] This RP supports the strengthening of an ICT legal and regulatory framework and enhanced adoption of ICT by private firms, which leads to improved efficiency and increased ability to compete globally. Thereby, the RP directly contributes to increased private sector trade and investment and USAID's Strategic Objective (S0) 16 "Environment for Trade and Investment Strengthened."

The RP two focus areas correspond directly to the three Intermediate Results (IRs) under SO 16 These are:

- IR 16.1: Improved policy framework for Trade and Investment.
- IR 16.2: Improved private sector competitiveness, and
- IR 16.3: Enhanced opportunities for business growth

The following are specific indicators of success of the ICT RP:

- World Trade Organization (WTO) Basic Telecommunications Agreement (BTA) signed by the GOE,
- WTO Information Technology Agreement (ITA) signed by the GOE,
- An increased number of private-sector licenses and operators providing telecommunication services in Egypt (non-private networks),
- E-Commerce laws passed by Parliament, and
- An increased number of new ICT-related businesses.

This RP, along with other IT-related RPs in the Mission, can directly contribute to the achievement of SO 16 results which will be measured by indicators relevant to ICT activities. These include: WTO compliance and DSP conditionality. For example, signature of the BTA and ITA agreements (the first, second and fourth bullets above) forms part of sub IR level SO 16 indicators for WTO compliance and progress in

[5] National Telecommunication and Information Administration (NTIA), U.S. Department of Commerce. *The Emerging Digital Economy*. 1999.

achieving DSP conditionality. For SO 16's 16.2, the last bullet above (i.e. an increased number of new ICT related businesses) should contribute to accomplishment of ICT related aspects of the Global Competitiveness Index. Finally, for SO-16's 16.3 two bullets above regarding new telecom licensees and new ICT businesses may contribute to indicators under 16.3.2. achievement of market information improved and increased via number of websites in relevant sectors, and number of information download and inquiries in relevant sectors.

Given the Agency's new focus on SO level programming and performance, achievement of any given SO 16 indicator may draw from various RPs -- i.e. no one RP necessarily has "ownership" over indicators contributing toward accomplishment of an SO level IR. Thus, this ICT RP and the new Work Force Initiative (SO 17) are likely to both contribute to 16.2 indicators of the Global Competitiveness Index, and this ICT program and the ongoing GTG RP are likely to be contribute data for market information and website indicators in achieving SO 16's 16.3.2's results.

Additional refinement of these ICT specific indicators, their enhanced complementarily with SO 16 and 17 level indicators and their prioritization for reporting purposes under the next R4 will be part of the RP's Institutional Contractor work plans, as further discussed in Sec. III.C. of this RP document.

F. Life of Results Package (LORP) Period

The life of the ICT RP is six (6) years of funding (FY 2000-2005). The ICT RP project completion date (PACD) will be September 30, 2005.

It is expected that the majority of the ICT RP activities will be implemented through a performance-based, cost plus fixed fee USAID direct management services contract with an U.S. firm. This contract would provide technical assistance, grant management, procurement services and training coordination. It is expected that this contract will be awarded for a four-year period, commencing in FY 2001, with a one-(1) year extension option.

II. Activities Description

A. Summary of Activities

The ICT RP contains an inter-linked package of activities corresponding to two focus areas: 1) Improved legal and regulatory framework for the ICT sector including introduction of telecommunication and e-commerce regulations, and policies; and 2) Expanded adoption and delivery of ICT within Egypt. An outline of the ICT RP activities is listed below.

1. Improved Legal and Regulatory Environment

The legal and regulatory activities under this ICT RP will focus on two main legal areas: telecommunications and e-commerce. Activities under this focus area endeavor to provide technical assistance in drafting ICT related laws, regulations and procedures, ensuring adoption of and compliance with specific ICT-related international agreements, and training responsible GOE organizations on implementation, and enforcement of ICT laws and regulations. This RP includes technical assistance to Subcommittee II of the Gore-Mubarak Partnership. This subcommittee is focused on High Technology and provides a forum for high level discussion of policy issues. In this regard the RP will provide technical assistance to subcommittee II and Presidents' Council (if necessary) regarding legal and regulatory issues listed below:

1.1 Telecommunication Legal Reform Activities

In the past decade, USAID has been heavily engaged in providing development assistance to the GOE in an effort to help expand its telecommunications infrastructure. In addition, USAID has been successful in supporting the GOE's movement toward privatization of this sector. USAID support has led to the establishment of a new regulatory authority, the TRA, and more recently, the development of a new draft Telecommunication Law. This draft law is likely to be passed by Parliament in 2001. Following the anticipated passage of this law, effective and transparent implementing rules, regulations, and administrative procedures must be developed. These rules and procedures include licensing, tariff setting, interconnection, a national numbering plan, and universal service/access. Outlined below are a number of proposed activities as part of the telecommunications legal and regulatory reform activities.

- **Assisting in Drafting the Telecommunications Rules and Regulations.** The new telecommunications law, if passed, is expected to provide the TRA with broad authority to promulgate and enforce a wide array of telecommunications rules and regulations. This activity will serve as the vehicle to provide technical assistance to the TRA in assessing both the draft and final telecommunications law (in an effort to determine the breadth of potential rulemaking), to gain consensus on this breadth, and to establish priority areas for near-term and long-term attention. To this end, a master schedule will be developed that categorizes rule and regulation promulgation into high and low priority areas. High priority focus areas are expected to include: interconnection (between the mobile operators and the monopoly land-line provider), a national numbering plan, tariff setting, licensing of spectrum for mobile operations, universal service/access, and electronic dispute resolution. Technical assistance in this field will focus on voice and data communication (not on radio or television broadcast, with the exception of the associated spectrum management).

  Of special high priority will be technical assistance in setting the direction on Universal Service. Recent International Telecommunications Union (ITU) data reflects a considerable disparity between the teledensity levels in urban and rural areas within Egypt. Much of the focus to date has been on the market entry of mobile operators and the corporatization and partial privatization of Egypt Telecom. However, little effort has been committed to ensuring growth in telecommunications access in smaller cities, villages, and rural areas. One key mechanism to achieving parity between urban and rural areas is the establishment of Universal Access/Service policies, their supporting regulations and implementing mechanisms. Typically, these are developed within the larger context of policy and regulatory reform. However, due to importance in supporting economic development in rural and remote areas in Egypt, the frequent lack of market forces in these areas, and USAID's interests in supporting other socially oriented activities in these rural areas, technical assistance to support Universal Access/Service demands priority attention.

  The Universal Access/Service technical assistance will build upon the new Telecommunications Law, following its assumed passage, and will examine potential alternatives for enhancing connectivity in lower-density, higher-cost areas. The alternatives will be explored with respect to financing, market approach, costs, benefits, and priorities. They will be discussed with key GOE Ministries, with the MCIT taking the lead in building consensus to the degree it requires other GOE organizations to support the chosen approach. Upon the GOE selecting an approach, rules and regulations will be drafted, approved, and put into place. Implementing mechanisms will need to be developed and put into operation, such as the collection of a Universal Service fee from each of the current telecommunications operators, and the management of a Universal Service Fund (e.g., allocation/distribution criteria and mechanism). Here, technical assistance would be aimed at supporting MCIT, TRA, and potentially an entity established to manage the Universal Service Fund.

- **Transparency in telecommunication rules and procedures.** In an effort to establish independence and credibility, the TRA will need to carry out its activities with a considerable amount of public and private sector input. Inclusive processes and procedures must be established at the outset of TRA's operations to ensure public awareness of the unfolding telecommunications environment and to solicit comments from a wide array of sources. In addition to public announcements via mass media such as the local newspapers, radio, and television, technical assistance will likely support the establishment and maintenance of an Internet Web site for publication of draft regulations, and GOE implementing policy and procedures; soliciting comments; and fielding complaints and suggestions.

- **World Trade Organization (WTO) Basic Telecommunications Agreement (BTA.).** At the international level, the WTO has established a framework agreement whereby countries can selectively agree to liberalize sub-sectors of their telecommunications portfolio for specific levels of private participation. At present, more than 69 countries have signed on to the BTA, legally committing to specific areas of liberalization. Egypt is not now a party to the BTA. The MCIT has expressed great interest in making Egypt a signatory to the BTA, and the Minister of the MCIT is working to persuade other cabinet members of the importance of Egypt's signature and ratification of the BTA.

  The ICT RP will provide technical assistance to support the GOE's signature and ratification of the BTA. This would be pursued by first undertaking an economic analysis of the potential impact of such an action on the Egyptian telecommunications sector and on state revenues from the sector. The analysis would logically assess the potential impact of a number of options available to the GOE – from simply offering up the current status of its sector reforms to what would be considered a more free and open marketplace for telecommunications. The results of this analysis will be shared with the GOE cabinet and used to support the MCIT's goal of Egypt's ratification of the BTA.

1.2 WTO Information Technology Agreement (ITA) Activities

The ICT RP seeks to obtain the GOE's signature and ratification of the WTO's ITA. As with the BTA, this would be pursued by first undertaking an economic analysis of the potential impact of such an action. The analysis would assess the potential impact of eliminating the duties on selected IT-related products, and the resulting economic impact to the private sector in Egypt. It would make recommendations on timing relative to phasing out current duties. Based on this analysis, high-level concurrence would be gained within the GOE on the option to be pursued.

1.3 E-Commerce Legal Reform Activities

One of the current dynamics taking place in both the public and private sector worldwide is the rapid increase in the use of the Internet for carrying out commercial activities. This has been going on for some years between business partners (B2B) as they link their internal systems to improve efficiency. In recent years this has started to move

from the private networks to the Internet. In addition, there has been tremendous growth in the use of the Internet by consumers in purchasing products and services (B2C). This dynamic has brought to the surface a wide range of legal and regulatory issues that need special attention and clarification. Since much of this reliance is on international as well as domestic commerce, local actions must also take into account international norms and multilateral solutions. Egypt, however, lags behind in the area of e-commerce and e-business, in both B2B and B2C transactions.

The following series of activities support the drafting and passage ICT e-commerce laws, regulations and implementing procedures; support specialized professional training to GOE ICT authorities in the design and operation of systems to implement ICT laws and regulations; and support specialized professional training and continuing legal education for the Egyptian judiciary and legal professionals in both the public and private sector, in the emerging area of e-commerce law, including the complexity and scale of the legal issues associated with e-commerce and e-business transactions.

This technical assistance and training will lead to an improved legal and regulatory environment for ICT in Egypt and enhanced private sector use of e-commerce as a tool to promote greater productivity and competitiveness. This, in turn, supports more effective participation of the Egyptian private sector in the global economy resulting in increased trade and investment.

· **Assisting in Drafting the E-Commerce Related Laws and Regulations**. ICT RP technical assistance will be provided to the MCIT ,TRA and MOEFT, as appropriate, to support the drafting and passage ICT e-commerce laws, regulations and implementing procedures. The following are legal issues of high priority for ICT development, specifically e-commerce, in Egypt:

- Legal Validity of Electronic Information and Data Messages
- Electronic Signatures
- Encryption and Security
- Technology/Computer Related Crimes
- Intellectual Property Rights
- Privacy
- Consumer Protection
- Taxation and Customs

· **Training of GOE ICT Institutions, Egyptian Judiciary and Legal Professionals in E-Commerce Law and Other ICT Legal Issues.** Legal and regulatory reform will only be meaningful if there are ICT regulatory authorities with a skilled professional staff of regulators who have the resources and commitment to implement ICT law and regulations. In addition, there must be an adequate number of legal professionals proficient in e-commerce law and related ICT legal issues to provide legal advice and

counsel for enforceable e-commerce transactions. Finally, there must be a judiciary educated in and capable of presiding over e-commerce litigation and other ICT-related proceedings.

The ICT RP will provide e-commerce and ICT-related legal training to TRA, the MCIT, and other GOE ICT-related regulatory authorities, as appropriate. This would include technical assistance and training to enhance the professional capabilities of these authorities to carry out their dictate, including investigative and forensic functions conducted under judicial or prosecutorial control. Technical assistance will also be provided to support the establishment of a national ICT inter-governmental Web-based database to link ICT regulatory agencies with each other and to provide access to other Internet-based ICT resources, thereby promoting sharing of information and Web-based education and training. It is envisioned that this type of technical assistance and specialized professional training of ICT regulatory authorities will help to improve the administration and management capabilities of these authorities, thereby ensuring that Egypt has transparent, effective and sustainable organizations to implement ICT law and regulations.

Training of the judges will support the development of a judiciary that is competent to preside over cases and other proceedings involving e-commerce law and ICT related legal matters, such as e-commerce consumer protection, protection of intellectual property rights, protection of privacy over the Internet and ethical standards for e-commerce transactions. This will lead to the improved administration of justice and strengthen respect for e-commerce and other ICT-related rules of law.

Correspondingly, training public and private sector legal professionals in e-commerce law and other ICT legal issues will help to ensure that Egypt has a qualified pool of ICT legal professionals to draft, implement, and enforce e-commerce transactions and related rights.

1.4 Electronic Dispute Resolution through Cairo Arbitration Center Activity

Egypt has a well-established system for commercial arbitration in both domestic and international disputes. The Cairo Regional Center for International Commercial Arbitration is an independent non-profit international organization that facilitates dispute resolution through arbitration for regions including West Asia and Africa. The Center handles approximately 25 international cases and 30 domestic cases each year. On average, a case may take one year or more to be resolved. At times, delays in dispute resolution are based on the fact that arbitrators, often a mix of national and international experts, are not able to synchronize work, due to the physical distance between them.

One way to eliminate this barrier is to use video-conferencing as a medium for dispute resolution. Additionally, an Internet-based medium for dispute resolution would serve as an effective tool in promoting prompt resolution of disputes. Currently, there is no such facility in Egypt.

Technical assistance will be designed to provide support to the Cairo Regional Center for International Commercial Arbitration in developing an Internet-based mechanism for dispute resolution and in development of a system for video-conferencing. Initial support would include procurement of limited, but necessary video conferencing equipment, computer hardware and software, and computer-based language translation systems.

In addition, staff training in use of this equipment and in the utility of ICT based dispute resolution tools will help to improve the efficiency of the Center, reducing the time and resources devolved to resolving disputes. This will enable the Center to handle a greater number of disputes in a more efficient and transparent manner.

1.4 Technical Assistance to GOE ICT Institutions

The following activities seek to strengthen the near-term capacity of the MCIT, and TRA, the two GOE institutions responsible for ICT regulation and enforcement in Egypt.

Fully Functioning and Effective MCIT Activity

The MCIT was established in October 1999. Its first mandate was to formulate the ICT national plan for Egypt. Although the MCIT met this mandate, it has yet to implement the plan. Limited resources and minimal, unqualified staff have prevented the MCIT from operating as an effective ICT GOE institution.

The MCIT requires technical assistance to design and implement an effective management structure and operating units, to recruit and/or train qualified ICT staff, and to develop, in a transparent manner, effective regulations and procedures. The ICT RP seeks to provide technical assistance to the MCIT in meeting these objectives.

Once there has been agreement within the MCIT on its target organizational structure, a roadmap and implementation plan will be developed outlining a progressive movement from the current organization to the target structure. Considerable attention will be paid to ensuring that MCIT becomes a recognized and effective agent for ICT regulation and policy in Egypt, in both the public and the private sector. In addition, attention will be devoted to developing a high-quality professionally-competent staff (managerial and technical) sufficient to carry out the MCIT's dictate. This may include the establishment of Internet-based database of MCIT law, regulation and policy.

The ICT RP will **not** support capital projects (including construction and general infrastructure development), will not support recurrent costs for the MCIT, such as staff employee salaries and benefits, operation and maintenance and utilities. ICT-related hardware, software and services may be acquired under this activity.

Independent, Functioning, and Effective TRA Activity

The anticipated passage of the telecommunications law will provide the essential basis upon which to build and shape an effective telecommunications regulatory agency. This activity will focus on strengthening TRA as a telecommunications regulatory organization in the GOE, unlike the Legal and Regulatory Reform TRA activity, which focuses on drafting and implementing the underlying regulations and policy under which TRA will both operate and enforce.

Organizational and Managerial Assistance. At present, the TRA has minimal staffing, with limited experience in regulating the telecommunications sector within Egypt. Technical assistance to TRA will include assessment of the current organizational structure and environment within the TRA, including assigned legislative mandates and organizational structure in order to develop the optimally efficient organizational structure and staffing plan. Once agreement is reached within TRA on the target organizational structure and staffing plan, a roadmap and implementation plan will be developed. In addition, substantial attention will be devoted to training a high-quality professionally competent staff able to carry out the responsibilities of the TRA.

Spectrum Management Technical Assistance. One of the core operational responsibilities of the new TRA is managing the use of the radio spectrum within Egypt. This responsibility will become increasingly critical as the reliance on wireless technologies, mobile, fixed, and satellite, increases in the future. Notably, expected licensing fees obtained for newly licensed telecommunications service providers should be used as the primary source for supporting the proposed Universal Service Fund. The Spectrum Management technical assistance will start with the assessment of the International Telecommunications Union (ITU) allocation tables for determining where Egypt should adopt and where it should vary from international norms. This will be compared to current use within Egypt, targeted use, military/police allocations and others as appropriate. The expected result of this activity is a frequency allocation table for the country of Egypt.

Frequency Monitoring. The ICT RP will assist TRA in developing a comprehensive database of current use of frequency bands – including all telecommunication licensing by private and public firms at each major geographic location based on the frequency allocation table. Assistance will also be available to establish frequency-monitoring capabilities (including hardware/software and knowledge/skills) in order to identify unlicensed use, monitor licensed use/conflicts, and make reallocations to unused frequencies. Establishing a licensing process that is streamlined, consistent, and transparent is another area of assistance. Such licensing information can be posted on the TRA Web site to achieve maximum transparency.

Effective ICT Federation

As noted, the MCIT has proposed the establishment of an ICT Federation comprised of representatives from the GOE (20%) and private sector (80%) under a special law. The Federation, if established, is expected to serve as a self-regulatory entity, certifying

IT companies, certifying e-commerce transactions, and assisting in the development of ICT human resource polls in Egypt and in developing and overseeing ICT parks. However, there is no defined purpose, structure, or mandate for the Federation as the idea of such an organization is still at the conceptual stage. As such an organization could ultimately play a pivotal role in ICT in Egypt, USAID/Egypt should not overlook the unique opportunity to assist in the design, development, and implementation of this proposed entity. More specifically, the ICT RP will provide technical assistance to the MCIT to assess the proposed purpose, membership, structure and mandate of the Federation, make recommendations for all these components, and provide near-term start-up assistance to the organization to ensure that it serves the ICT business needs of Egyptian firms. ICT-related hardware, software and services may be acquired under this activity.

The ICT RP will **not** support capital projects (including construction and general infrastructure development), will not support recurrent costs for the MCIT, such as staff employee salaries and benefits, operation, maintenance and utilities. ICT-related hardware, software and services may be acquired under this activity.

1.4 Training

Whereas the bulk of these activities include providing technical assistance in order to improve selected ICT-related public sector entities, there is also the need to provide training for key staff. This training will be constructed and delivered as an integrated component to improving the adoption and delivery of ICTs within the various GOE entities. These will serve to strengthen the skill/knowledge level of key staff within these entities in an effort for ensuring long-term sustainability and continued progress beyond the life of these interventions. This training will be a combination of U.S. and local training depending on the numbers and availability and will include seminars, conferences, as well as study tours.

2. Expanded adoption and delivery of ICTs within Egypt

These private sector activities are aimed at increasing the adoption (demand) of ICT-related services and products by non-ICT businesses in an effort toward increasing their competitiveness via increased effectiveness and efficiency. In addition these activities focus on improving the actual delivery and quality (supply) of these ICT-related services and products by the ICT sector within Egypt. This will be accomplished via an awareness/education effort, but more importantly will be accomplished via linking U.S. and Egyptian firms (non-ICT as well as ICT) in such as way as to facilitate technology transfer in both the application and delivery sides. Support also includes providing critical business incubator-like functions, working with the public and private sectors to establish and e-Commerce infrastructure, and in leveraging existing USAID financial and workforce/educational activities.

The following are the types of technical assistance the ICT RP will provide to non-ICT firms:

2.1 Technical Assistance to non-ICT Firms

TA to non-ICT firms operating in Egypt will focus on the adoption of ICTs as integrated components of their business operations in order to gain effectiveness and efficiency. This is in support of improving their competitiveness in both the local and international markets. The orientation will be that of increasing the speed of this adoption by promoting the partnering of non-ICT firms with ICT particularly in such sectors and financial, agribusiness, pharmaceutical and tourism sectors. This activity seeks to enhance ICT awareness and education of private sector firms' management, highlighting its potential impact on business efficiency and competitiveness. The first task under this activity will be to complete a social marketing study on ICT awareness needs, and opportunities to incorporate ICT into business operations and systems. Based on the outcome of the study, events will be designed and carried out targeting upper and middle management and technical staff at these firms. The focus of the message will be on the integration of ICT into daily business operations. Some of these events can be conducted in cooperation with ICT business associations and will be offered throughout the country to reach larger audiences, particularly those in rural areas traditionally unfamiliar with ICT. Various channels can be used to promote seminars and workshops including printed media, TV, Internet and others. This will take a sector-by-sector orientation—working with the appropriate business associations and any pre-existing USAID activities already engaged in a given sector.

Follow-up of the impact of such activities and providing technical assistance on firm level to ensure adoption ICT is essential. The technical assistance will operate as a business center providing incubator-like activities in supporting the firms in their adoption of ICTs—again with a high degree of leveraging U.S. best practices.

With regard to supporting SMEs via financing, this activity will build on USAID/Egypt's existing support for SMEs in Egypt, including the Credit Guarantee Corporation (CGC) activities and the business foundations loan program. Specifically, the ICT RP will provide ICT technical assistance to SMEs that are willing to incorporate IT in their business to become more efficient and competitive and that are receiving credit support from USAID SME programs. Technical assistance will be provided to CGC and the foundations to define the lending instrument, screen proposals and market the idea to banks. Technical assistance will also be provided through these entities to borrowers to support them in drafting their business plans, developing marketing strategies and resolving technical problems. During the lifetime of the loans, assistance will be given to borrowers to ensure proper management of the business and to advise on changes needed due to the rapid developments in this sector.

This activity will focus support on businesses located in rural areas or smaller towns and will also focus on women owned businesses. This activity will specifically aim at addressing the "digital divide" (or ICT usage gap) between large cities such as Cairo/Alexandria and the rest of Egypt by working with both the public and private sectors.

As with the non-ICT SMEs support to small and medium ICT, start-ups or expanding ICT companies will obtain financial support via CGC and the business foundations, as well as technical assistance. The support will include technical assistance to CGC and the foundations in reviewing proposals, marketing the idea to banks and providing assistance to borrowers prior to and after receiving the loan. The latter assistance would include help in drafting business plans and marketing strategies and management of the business.

2.2 Pilot Projects within Private Sector, NGOs and GOE

This proposed activity seeks to create success stories demonstrating the impact of IT on efficiency and competitiveness, thus building awareness among both the private sector and government. This activity will start by doing a survey to identify potential pilots or models within the private sector and NGOs. Potential sectors for private business pilots would be tourism, agribusiness services and the pharmaceuticals. Assistance provided at the firm level will most likely be provided by NGOs that are potential recipients of grants under the ICT RP.

The following are the proposed criteria for selection of pilot projects. Note that this activity and these criteria for selection will have to be further refined.

- Directly impacting on the business environment;
- Showing significant results in a short period of six to eight months;
- Being easily replicable;
- Support of the top management in the private sector or the relevant Ministry;
- Ability to maintain the pilot;
- Incorporating at least some transaction or e-commerce elements.

Potential candidates for GOE pilot projects may address activities under MCIT, MOEFT such as business licensing, ICT acquisitions, securing export licenses, and requests for licensing frequencies.

2.3 Telecenters Activity

As technology develops, individuals who use technology find themselves having to learn new systems and software. At the same time, those who are excluded from access to technology are often not even aware that they are falling behind. Computer and Internet access cannot only bring information to communities but can empower citizens to direct or lead decision making that impact their communities.

The proposed ICT RP Telecenter activity is aimed at launching a private sector run Telecenter initiative that will serve to expand awareness, improve access to ICT, and provide key ICT tools for those businesses and individuals living in Egypt's small cities and towns, villages, and rural areas. The Telecenter activity helps create ICT demand by expanding ICT awareness among the public. In addition, in itself it is a highly-specialized ICT SME support activity. This initiative will be launched by undertaking a

feasibility assessment of ICT Telecenters in Egypt. This study will include assessing the current access limitations within Egypt; exploring possible approaches for delivering access to remote areas, examining current donor, GOE, NGO, and private sector initiatives; and working with the MCIT, the Information and Decision Support Center (IDSC), and other GOE Ministries and regional governorates to identify need and establish priorities. Implementation will best be accomplished in phases where the initial phase will involve the establishment or expansion of a network of telecenters, including hardware, software, and staff training. The second phase will assess the utilities initiated under the first phase. The third and final phase will include the fine-tuning of the centers to address the ICT needs of the communities they serve, equipment maintenance and up-dating, staff training in ICT, and sustainability efforts, including establishment of business plans, staffing needs, fee structures, fund-raising, etc.

The locations of these Telecenters will most likely include stand-alone Telecenters, Telecenters implemented within existing NGOs/PVOs, Telecenters placed into existing SMEs, as well as the potential of operating within Post Offices and Libraries. With regards to the latter, at present there are approximately 1,300 libraries in Egypt with over 9,000 librarians having university degrees working within these libraries. Of the more than 1,300 libraries, 119 are on the library electronic network and 34 have Web sites. This is a good resource to start with – an educated audience already beginning to develop an electronic network and already sharing information. However, all 1,300 libraries need to be networked and each library should be accessible through an Arabic language website.

The ICT RP will **not** support capital projects (including construction and general infrastructure development), will not support recurrent costs for the MCIT, such as staff employee salaries and benefits, operation, maintenance and utilities. ICT-related hardware, software and services may be acquired under this activity.

2.4 Strengthen ICT-related Business Associations

This activity will seek to collaborate with the existing Workforce Strategic Objective in expanding and strengthening the role of existing high-tech associations. The ICT RP will specifically focus on linking these high tech associations with their U.S. counterparts where appropriate, and in establishing on-going activities within these associations that support brokering business partnerships and technology transfer arrangements between U.S. and Egyptian high-tech firms. Special focus will also support seeking avenues for reaching beyond Egypt in supporting their members business expansion activities. The ultimate goal in strengthening the ICT-related Business Associations is to bring them to a position such that towards the end of this development activity, these associations can provide similar technical assistance to their members as is being provided by the activities outlined in 2.2, above.

2.5 Technical Assistance to support the establishment of Private Sector-Led E-Commerce Environment/Capabilities

With the planned liberalization of telecommunications and e-commerce legal and regulatory environment, there is the need to support the establishment of an E-Commerce environment within Egypt. This activity will provide Technical Assistance for pulling together an array of public sector agencies, including MCIT and MOEFT, and mostly private sector participants to establish a viable e-commerce environment that includes, for example, financial/payment services and distribution/delivery capabilities. Without a comprehensive Egyptian solution put into place, as e-Commerce use expands it will reach out to external sources for these capabilities—lessening the potential benefit to the Egyptian economy and firms operating in Egypt. Without these capabilities e-Commerce, while not limited due to legal restraints, will not fully develop due to lack of local comprehensive and integrated solution sets for delivering the needed capabilities.

The ICT RP will **not** support capital projects for this infrastructure, will not support recurrent costs for the infrastructure, including staff salaries and benefits, and will not be of a long-term nature. ICT-related hardware, software and services may be acquired under this activity.

2.6 ICT-Related Grants

In addition to the ICT-related Technical Assistance provided to for-profit firms, this ICT support will also provide grants to non-profit organizations in an effort to advance the adoption and delivery of ICTs within Egypt through development of new technologies. These grants will likely involve U.S. and local NGOs, including US and local universities.

2.7 Training

Whereas the bulk of these activities include providing technical assistance in order to improve selected ICT-related private sector firms and associations, there is also the need to provide training for key staff. This training will be constructed and delivered as an integrated component to improving the adoption and delivery of ICTs within these private entities. This training will serve to strengthen the skill/knowledge level of key staff within these entities in an effort for ensuring long-term sustainability and continued progress beyond the life of these interventions. This training will be a combination of U.S. and local training depending on the numbers and availability and will include short seminars, conferences, as well as study tours.

2.8 Venture Capital Initiatives Assessment

Egypt venture capital initiatives are in their embryonic form. Announcements are made of newly established venture capital firms created with the expressed goal of identifying and financing ICT enterprises. However, their impact on the market is not yet measurable. This may be due to the fact that these initiatives are new and need more time to crystallize. It could also be that there are other inhibiting factors and/or that Egyptian entrepreneurs are not used to the notion of equity as opposed to loans. This

activity will undertake research in order to determine the obstacles to the flourishing of venture capital as an instrument to finance higher risk new ventures in the ICT sector.

The activity will consist of an assessment to define ways of stimulating ICT venture capital financing which has become a preferred tool for the financing of new or emerging ICT companies in the West. This activity will **not** actually provide venture capital to ICT firms, but will identify the best mechanisms and avenues of providing venture capital to firms.

B. Critical Assumptions and Plans for Sustainability

For the past several years, the GOE has pursued a course toward establishing and strengthening a market-oriented economy. It is assumed this direction will continue, and that the GOE will continue to improve the policy and regulatory environment within which the private sector can more effectively conduct business.

It is also assumed that the private sector will actively participate in this more liberalized economic environment and increase its investments in the Egyptian economy. Finally, it is assumed this direction will not only apply to the domestically-oriented businesses, but that the private sector will become increasingly engaged in international transactions and enhanced participation in the global economy.

During the past year, the GOE has placed special emphasis on the development of Egypt's the ICT sector. This has resulted in a reinvigorated Gore-Mubarak Partnership, the establishment of the MCIT, and several targeted ICT initiatives. The ICT RP will help Egypt to translate its interest in ICT into tangible results. It will also help private sector ICT businesses to leverage the enabling environment (primarily telecommunications and e-commerce) and increase the demand and supply of ICT-related goods and services.

In sum, the ICT RP activities seek to create a more liberal and empowering environment for ICT awareness, transactions and application through transparent and effective laws, and procedures, and through training and education of a qualified ICT workforce. The goal is enhanced competitiveness through an enabling, stable, and predictable legal environment for key telecommunications and e-commerce.

III. Implementation Plan

A. Implementation Mechanisms

This Results Package incorporates a wide spectrum of technical assistance, commodities (primarily ICT-related) and training (managerial, professional, and technical). In an effort to shorten the start-up time and lessen the workload of USAID/Egypt in getting work underway, various contracting options were explored – including the potential reliance on pre-existing contracting instruments.

1. Procurement Options

There are a number of options available to USAID/Egypt through pre-existing contracting instruments. These include those available to the Mission via the US General Services Administration (GSA), those available from other US Federal Agencies (via what is referred to as Government Wide Acquisition Contracts or GWACs), and those that have been established by USAID itself. Finally, there is the potential for reliance on other USG Agencies via the use of Interagency Agreements. In addition there is the default position of either the Mission or USAID/Washington issuing a full and open competition through the standard Request for Proposal (RFP) procedure.

- **Inter Agency Agreements** – Inter agency agreements can be established for securing long-term support from other USG agencies that possess key knowledge and skills not available within USAID and which may be better satisfied via the USG. This could, for example, be a vehicle for securing highly specialized legal assistance from the Federal Communications Commission, for help in writing regulations and rules and establishing related procedures in support of TRA. Another potential may be in the area of e-commerce related legal reforms where the USG's Department of Commerce could be of assistance.
- **RFP** – Ultimately USAID/Egypt will develop a Statement of Work (SOW) specifically for this ICT-RP, and issue (either itself or via USAID/Washington's Office of Procurement) an RFP specifically for this work.

2. Assessment/Recommendation

Clearly, the use of pre-existing contract instruments – be it from GSA, other USG Agencies, or even USAID itself – has the advantage of reducing the initial workload and time needed to get a contract in place, as well as the on-going time/costs in administering the contract. However, there are also the disadvantages that come with these contract instruments. First, they are not tailored for the needs of this ICT-RP.

Secondly, they typically have terms and conditions that may not be optimal for this effort. And thirdly, it places the Mission and the Program Officer at least one step removed from the ultimate provider of the services. In addition, rarely are these contracts set up to provide overseas services in developing countries, where international development is the primary focus. This is not the case with those established by USAID/Washington, however in this area there are not many options to select from.

Another consideration is that while this Results Package addresses the ICT arena, to a significant degree it is not about ICT. It includes some commodities, but this is not its primary focus. The ICT-RP reflects a somewhat unique blending of work that builds around an ICT focus, but includes technology, content development, public sector-led legal and institutional strengthening, and private sector-led enrichment. It is taking place within an environment that is under constant change with respect to new legislation, new government entities, new technologies, and new application of these technologies by both public and private participants.

It is highly unlikely that a preexisting USG vehicle can be found that is adequate for addressing this significant array of elements, and at the same time flexible enough to accommodate anticipated changes and dynamics. While there are likely sub-components that could be undertaken by these vehicles, none appear to be sufficient to address the totality of activities in an integrated manner.

Recommended Approach – It is recommended that the bulk of the work to be carried out under this ICT-RP be implemented via the preparation and issuance of a single Request for Proposal for providing multiple-year support from a prime contractor and possibly sub-contractors and/or cooperative agreement grantees. Due to the dynamics taking place in the sector, and the absolute need for quality performance by the contractor and subcontractors, it is recommended that the contract be let for four years, with one optional year.

It is anticipated that the prime contractor will put into place a core team that will provide the long-term project continuity and establish and maintain key USG, partner, constituency, and customer relationships essential for the success of this initiative. While this team will provide lead professional expertise in each of the key areas, the contract will rely on the use of short-term expatriates for more highly specialized knowledge/skills, and for undertaking short/specific activities and assignments as required. As noted, grants and cooperative agreements are also recommended implementation instruments. Cooperative agreements would be administered by USAID while the prime contractor is expected to provide grant management services.

In addition to the institutional contractor, it is recommended that funds be programmed for selected use of inter-agency agreements and IQCs whereby specialty USG Agencies can be brought in to support those areas where unique USG and States experience have much to offer.

B. Management Plan Activities

The MCIT and MoEFT will be the principal GOE counterpart organizations receiving direct assistance from the prime contractor. While the bulk of the direct assistance will be managed through the institutional contractor, the ICT-RP provides for funding for grants, Interagency Agreements, and IQCs in order to gain a more rapid implementation on key initiatives and to fill potential gaps where the prime contractor does not have or cannot reach the requisite knowledge/skills.

Near-Term Activities – The current lifecycle for this Results Package assumes that an Agreement will be signed between the GOE and the USG by the end of September 2000, and that an initial obligation of FY2000 funds will be made upon the signing of this Agreement. Following the Agreement there will be the need to develop an RFP, make an award, and get the institutional contractor on board. This may not be completed until the spring of 2001 – at least six months away.

The anticipated six- to eight-month delay while the RFP is being tendered may simply be too late to take advantage of the near-term window of opportunity. Thus, it is recommended that consideration be given to getting underway on several key areas where timing is critical. During this interim period, there are a number of smaller activities that can be initiated via existing IQCs, direct grants, or other mechanisms. Key areas where these interim measures should be undertaken are:

- Interim organizational and program planning support for MCIT and the proposed Federation;
- Interim organizational and program support to the TRA with regards to reviewing the draft telecommunication legislation and developing a work agenda for drafting regulations and procedures;
- Assessing and developing targeted pilot projects;
- Identifying key U.S. and Egyptian partnerships for subsequent activity once the prime contract is in place;
- Undertaking the Telecenter feasibility study; and
- Working with the involved GOE Ministries with regards to reviewing the draft e-commerce legislation and establishing a work plan for moving e-commerce forward.

USAID RP Management Team. A United States Direct Hire (USDH) and a Foreign Service National (FSN) from Economic Growth/Privatization and Finance (EG/PF) Division will handle the RP overall management. The ICT-RP Team will be located within the Strategic Objective 16 Team. The RP team staffed with USDHs, FSNs, and, and possibly Personal Service Contracts (PSCs) from individuals with experience in the ICT arena and with specific background in institutional building, will provide assistance to the direct managers on regular bases especially with policy matters.

C. Performance Monitoring Plan

USAID and the GOE will undertake periodic baseline assessments, social marketing analyses, evaluations and impact studies to ascertain performance toward strategic results. As an effort to establish a foundation, upon which the progress of this activity can be monitored, a baseline study will be undertaken early in the implementation to identify key indicators and sources. Proposed indicators are mentioned earlier in the RP in the overview section. Based on the baseline study, the prime contractor will monitor targets on an annual basis, with the exception of ICT policy measures included in the DSP, which will be monitored by the DSP technical assistance team.

Monitoring of RP performance will take place through a variety of mechanisms: (1) periodic implementation meetings between the USAID RP manager, contractors and GOE implementing agencies; (2) quarterly implementation reports to be submitted by RP contractors; (3) occasional ICT workshops or conferences involving local public and private sector counterparts at which various perspectives on progress with RP indicators will be discussed. All these mechanisms willl be opportunities not only to measure implementation progress, but to fine tune or adjust RP activities and indicators, as required. In addition, the detailed implementation plan to be developed by the ICT RP Contractor, in consultation with USAID and the GOE, at the beginning of the contract period, will include interim steps and milestones to help guide the contractor toward eventual achievement of RP IRs. For example, during the first year of implementation key RP interim performance milestones will include a preliminary assessment of the development impact of telecom legal reform, carried out in cooperation with the Ministry of CIT. In addition, on the private sector side, continuing progress in the growth of ICT businesses will be another important milestone.

While the principal RP implementation contractor will assume management of performance monitoring upon award of this contract o/a Spring 2001, there will be a need to assemble baseline and other data from the very beginning of the RP. Such preliminary data will be assembled, in part, from prior ICT studies funded by USAID for this or other ICT related activities. In addition, once the RP is signed, the ICT Team will look to other ongoing Mission RPs or SOs to assist in generating baseline data for use by this RP: viz. for the indicator of existing "number of private sector telecom licensees and operators" from data with EG/PT and its General Dynamics contractor; and for the indicator regarding the existing "number of ICT related businesses" from firm level assistance data and surveys conducted by grantees such as the International Executive Service Corps (IESC), EXPOLINK or the American Chamber of Commerce in Egypt.

Finally, this RP will be working closely with other RPs in SO 16 (e.g. DSP) and SO 17 (work force), as these other activities carry out their own reports monitoring growth of ICT firms in Egypt (e.g. IESC CBS grant), verifying progress in producing a more ICT relevant work force based on firm level competitiveness surveys (SO 17), or noting progress with DSP policy measures as noted above. This RP will draw from such data, as appropriate, in reporting its own progress in meeting performance targets.